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**Apparatus and Methods for Entropy-Encoding or Entropy-  
Decoding using an Initialization of Context Variables**

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Field of the Invention

The present invention relates to entropy encoding/decoding  
and, in particular, to entropy encoding/decoding of video  
signals using a context-based adaptive binary arithmetic cod-  
ing scheme with initialization

Description of Related Art

15 Natural camera-view video signals as certain examples for  
general information signals show, as other information sig-  
nals, a non-stationary statistical behavior. The statistics  
of these signals largely depend on the video content and the  
acquisition process. Traditional concepts of video coding  
20 that rely on a mapping from the video signal to a bit stream  
of variable length-coded syntax elements exploit some of the  
non-stationary characteristics but certainly not all of them.  
Moreover, higher-order statistical dependencies on a syntax  
element level are mostly neglected in existing video coding  
25 schemes.

In contrast to the variable length coding, which is also  
known as Huffman coding, there also exist arithmetic coding  
schemes, which are mostly binary arithmetic coding schemes  
30 for a practical implementation of coding a sequence of infor-  
mation symbols having binary symbols. Such binary symbols are  
taken from a symbol set which has only two symbols, i.e., a  
binary "1", and a binary "0". A simple arithmetic coding